Supplemental Tables 1-4

Study section	NHLBI	NCI	NIGMS	NIAID
Vascular Cell and Molecular Biology Study Section	152	2	3	0
Myocardial Ischemia and Metabolism Study Section	130	0	1	0
Atherosclerosis and Inflammation of the Cardiovascular System Study Section	129	0	3	3
Basic Mechanisms of Cancer Therapeutics Study Section	1	187	4	0
Cancer Molecular Pathobiology Study Section	5	174	5	2
Tumor Progression and Metastasis Study Section	0	163	0	0
Macromolecular Structure and Function A, B, C, D, and E	13	27	489	31
Molecular Genetics A, B, and C	2	23	364	2
Synthetic and Biological Chemistry A and B	1	42	214	17
Cellular and Molecular Immunology A and B	3	13	18	206
Virology A and B	2	48	9	169
Bacterial Pathogenesis Study Section	1	0	4	133

Table S1. The number of proposals for each of 12 study sections that were eventually funded by the National Heart, Lungs, and Blood Institute (NHLBI), the National Cancer Institute (NCI), the National Institute of General Medical Sciences (NIGMS), and the National Institute of Allergies and Infectious Disease (NIAID) for Fiscal Year 2013. Only the three study sections that reviewed the greatest number of funded proposals per institute are shown in the rows. The content areas reviewed by these study sections can be seen as broadly representative of the funding priorities of the four institutes.

	NHLBI study sections			NCI study sections			NIGMS study sections			NIAID study sections		
	MIM	*AICS*	*VCM*	*CAMP*	*TPM*	*BMCT*	*SBC*	*MG*	*MSF*	*BACP*	*VIR*	*CMI*
Proposals needed after round one	1	2	2	1	1	2	2	0	1	0	0	0
Cardiac Contractility, Hypertrophy, and Failure	**0.96**	0.78	**0.82**	0.75	0.72	0.72	0.62	0.69	0.63	0.69	0.64	0.71
Vascular Cell and Molecular Biology	**0.83**	**0.94**	--	0.79	0.78	0.76	0.64	0.70	0.64	0.73	0.66	0.78
Hemostasis and Thrombosis	0.76	**0.86**	**0.86**	0.77	0.77	0.75	0.72	0.75	0.73	0.78	0.74	**0.80**
Tumor Microenvironment	0.71	0.79	0.81	**0.89**	**0.96**	**0.88**	0.67	0.69	0.61	0.70	0.66	0.76
Molecular Oncogenesis	0.72	0.77	0.79	**0.97**	**0.92**	**0.90**	0.66	0.77	0.63	0.72	0.71	0.77
Developmental Therapeutics	0.68	0.71	0.73	**0.85**	**0.88**	**0.94**	0.69	0.65	0.60	0.65	0.63	0.69
Macromolecular Structure and Function	0.61	0.64	0.64	0.66	0.61	0.64	**0.84**	0.78	--	0.75	0.74	0.69
Biochemistry and Biophysics of Membranes	0.66	0.69	0.68	0.69	0.65	0.67	**0.80**	0.79	**0.85**	0.78	**0.81**	0.76

Table S2. Cosine similarities of study sections with our target study sections. Bolded similarities represent values greater than or equal to .80. MIM = Myocardial Ischemia and Metabolism; AICS = Atherosclerosis and Inflammation of the Cardiovascular System; VCM = Vascular Cell and Molecular Biology; CAMP = Cancer Molecular Pathobiology; TPM = Tumor Progression and Metastasis; BMCT = Basic Mechanisms of Cancer Therapeutics; SBC = Synthetic and Biological Chemistry; MG = Molecular Genetics; MSF = Macromolecular Structure and Function; BACP = Bacterial Pathogenesis; VIR = Virology; CMI = Cancer and Molecular Immunology.

Model type	Coefficient	*N*	Median	Positive & significant	Negative & significant	Significantly within [-.5, .5]
Dummy codes	White female vs White male	2189	-0.02	0	0	2189
	Black male vs White male	2189	0.12	83	0	2000
	Black female vs White male	2189	-0.10	0	0	2188
Interaction	Race	2033	0.03	0	0	2033
	Gender	2033	-0.14	0	185	1913
	Race x gender	2033	-0.20	0	66	606

Table S3. Specification curve results. The "*N*" column gives the number of coefficients of the particular type from the specification curve analysis; "Median" gives the median across those coefficients; the remaining columns denote the number of coefficients with the noted properties. Note that 314 of the models failed to converge, meaning the sum of the number of dummy code (2189) and interaction (2033) models does not equal the number of models tested (4,536).

Ability	Achievement	Agentic	Negations	Negative	Positive	Pronouns	Research	Standout
ability	accomplish	achieve	cannot	deficient	acceptable	all	data	amazing
brilliant	diligent	ambition	doesn't	detracts	advances	either	experimental	excellent
flair	improve	boldness	hasn't	fails	convincing	he	grants	outstanding
genius	proficient	initiative	isn't	inappropriate	enthusiasm	nobody	methodology	remarkable
intelligent	solve	leader	neither	limits	impressive	she	published	uniquely
talented	strive	productivity	never	questionable	rigorous	they	research	wonderful

Table S4. The nine categories of words used to whether critique text differed by PI demographics. Six sample test words are shown for each category.